

AUTOMATIC GAIN CONTROL FOR IMAGE DISPLAY SYSTEMS

ABSTRACT

A control module for use in an image display system includes a histogram module operable to collect data associated with a first frame of a signal received by the control module. The histogram module comprising a plurality of storage modules capable of counting a plurality of pixels associated with the first frame. In one particular embodiment, each of the plurality of pixels comprises a maximum intensity component at a particular color level. The control module further includes a processor capable of determining a new position of an adjustable aperture based at least in part on the data collected by the histogram module. The processor further capable of determining a gain to apply to a subsequent frame of the signal based at least in part on the new adjustable aperture position.